

# Notice of Allowability

Application No.

09/943,308

Examiner

Dalena Tran

Applicant(s)

WALENTY ET AL.

Art Unit

3661

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/4/04.
2. ☒ The allowed claim(s) is/are 12, and 16-20 (now renumbered as 1-6).
3. ☒ The drawings filed on 31 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

**TAN Q. NGUYEN**  
**PRIMARY EXAMINER**

### **EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE**

1. This communication is an Examiner's reasons for allowance in response to application filed on 8/31/01, assigned serial 09/943308 and title "Adaptive compensation method for an anti-lock brake control".

2. The following is the Examiner's statement of reasons for the indication of allowable subject matter:

After carefully reviewing the application and the additional search of all the possible areas relevant to the present application, a set of related prior art references has been found, but those prior art references are not deemed strong to make the application unpatentable. Thus, it is found that the application is now in condition for allowance.

Although the references found disclose several claimed limitations, none of the references discloses a method of operation for a vehicle braking system including a driver activated brake pedal, a hydraulic brake pressure modulator, and an anti-lock brake control that activates the brake pressure modulator to modulate vehicle braking upon detection of an insipient wheel lock condition, the method comprising steps: adaptively adjusting a brake hydraulic pressure control parameter of anti-lock brake control when a condition of degraded braking effectiveness is identified so as to compensate for the identified condition; and wherein the condition of degraded braking effectiveness is determined by computing a rear speed difference between at least one front tire and at least one rear tire and comparing it to a pedal position dependent threshold value (claim 12); wherein the anti-lock brake control release and then re-applies brake pressure at a determined apply rate upon detection of an insipient wheel lock condition, and the step of adaptively adjusting a brake control parameter includes adjusting the

Art Unit: 3661

determined apply rate in a manner to provide an increased rate of brake pressure application (claim 16); also, the step of adaptively adjusting a brake hydraulic pressure control parameter includes steps of compensating the estimated road surface coefficient of friction for error due to the identified condition of degraded braking effectiveness, and determining a brake apply rate based on the compensated estimates of road surface coefficient of friction and the measure of braking effectiveness degradation (claim 19).

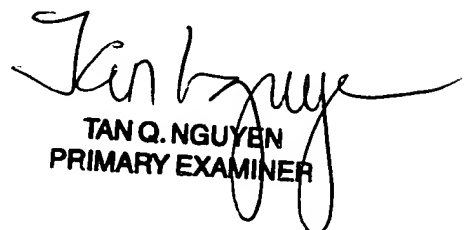
Claims 12, and 16-20, are allowable over the prior art of record.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/dt  
September 28, 2004

  
TAN Q. NGUYEN  
PRIMARY EXAMINER